

We Claim:

1. A method for diagnosing glaucoma in a patient, said method comprising the steps:

- (a) obtaining a biological sample from the trabecular meshwork of said patient; and
- (b) analyzing said sample for expression of GR β (SEQ ID NO:1);

wherein aberrant expression of GR β as compared to expression of GR β in a patient not suffering from glaucoma indicates a diagnosis of glaucoma.

2. A method for diagnosing glaucoma in a patient, said method comprising the steps:

- (a) obtaining a biological sample from the trabecular meshwork of said patient;
- (b) analyzing said sample for expression of GR β (SEQ ID NO:1); and
- (c) isolating the GR β expressed in said sample;

wherein a defect in the GR β isolated from said sample as compared to SEQ ID NO:1 alters the degree of alternative splicing between exons 8 and 9 α /9 β leading to altered expression of GR β and indicates a diagnosis of glaucoma.

3. The method of claim 2, wherein a defect in the GR β isolated from said sample is detected by a method selected from the group of assays consisting of: restriction fragment length polymorphism (RFLP), single-stranded conformation polymorphism (SSCP), polymerase chain reaction (PCR), denaturing gradient gel electrophoresis, allele specific oligonucleotide ligation, and allele specific hybridization.

4. A method for determining whether an agent is useful for treating glaucoma resulting from aberrant expression of GR β (SEQ ID NO:1), said method comprising the steps:

- (a) obtaining a composition comprising GR β (SEQ ID NO:1);
- (b) admixing said composition with a candidate substance; and
- (c) determining whether the candidate substance interacts with GR β in binding assays or alters the expression of GR β .